# **BALA SHETTY**

Cullen Trust for Higher Education Chair in Business, Mays Business School May 2023

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## **EDUCATION**

Ph.D., Southern Methodist University (Dallas), 1985 (Major: Operations Research)

M.S., Southern Methodist University (Dallas), 1981 (Major: Operations Research)

M.S., University of Mysore (India), 1977 (Major: Applied Mathematics)

B.S., University of Mysore (India), 1975 (Majors: Physics and Chemistry)

## IMPACT

While I am proud of my accomplishments as a scholar and an administrator, what I am most proud of is my contribution to the lives of thousands of Aggies as their teacher. Serving them has been the greatest honor of my 37-year career at Texas A&M University.

# **EMPLOYMENT HISTORY**

*Cullen Trust for Higher Education Chair in Business*: Mays Business School, Texas A&M University (2015-present).

*Professor (Courtesy Appointment)*: Department of Industrial and Systems Engineering, Dwight Look College of Engineering, Texas A&M University (2017-2022).

*Visiting Research Fellow*: Department of Financial Engineering and Operations Research, Princeton University (1996, 2008, 2016, and 2023, on leave from Texas A&M University).

Paula and Steve Letbetter'70 Endowed Chair in Business: Mays Business School, Texas A&M University (2007–2015).

Jenna and Calvin R. Guest Endowed Professor: Mays Business School, Texas A&M University (2004-2007).

*Professor*: Department of Information & Operations Management, Mays Business School, Texas A&M University (1999–2004).

Associate Professor: Department of Information and Operations Management, Mays Business School, Texas A&M University (1991-1998).

Assistant Professor: Department of Information and Operations Management, Mays Business School, Texas A&M University (1985-1991).

Visiting Associate Professor: Madrid Business School, Madrid, Spain (1992).

*Adjunct Professor*: Department of Information Technology and Operations Management, Cox School of Business, Southern Methodist University (1982-1985).

*Lecturer:* Department of Operations Research, School of Engineering and Applied Sciences, Southern Methodist University (1981-1982).

*Research Assistant*: Department of Operations Research, School of Engineering and Applied Sciences, Southern Methodist University (1980-1981).

*Market Analyst*: The International Agencies Company Limited (Sole Distributors for Philip Morris and Nestle) in Bahrain (1977-1979).

Consultant: Mercer Management Consulting, Dallas, Texas (2000-2002).

Consultant: Energy Management Associates, Atlanta, Georgia (1989-1990).

Executive Education: Halliburton, Diamond Offshore, and Kuwait Oil.

# LEADERSHIP APPOINTMENTS

# Interim Associate Dean for Graduate Programs: Mays Business School (2015-2016)

- Leadership responsibilities for Mays Full-Time MBA (FTMBA, 140 students), Professional MBA (Houston, 100 students), Executive MBA (Houston, 100 students), eight MS programs (700 students), and Graduate Career Management Center.
- Direct reports included Director of FTMBA Program, Director of Executive MBA Program, Director of Professional MBA Program, Director of MS Business, Director of Marketing and Admissions, Director of Graduate Career Management Center, and three Academic Professional Track (APT) faculty.
- Managed a team of 25 staff members and generated revenues more than \$13 million annually.
- Provided increased scholarship funding for seven MS programs to grow enrollment by 10% per university directive. All seven MS programs met enrollment goals.

- Increased MBA and MS fee which generated a \$950K in new revenues.
- Invested significant energy and resources into marketing and admissions in 2016. Added several outreach initiatives in the Houston business community. Recruited a class of 74 FTMBA, 46 EMBA, and 48 PMBA without compromising quality.
- Under my direction, the Graduate Career Management Center undertook one of the most aggressive employer outreach campaigns in years. A record 52 employers recruited MBA and MS students, including 14 new companies.
- Mays FTMBA program performed well in national rankings during 2015-2016: # 4 US Public (18 overall) in *Business Week*, #9 US Public (24<sup>th</sup> overall) in *Forbes*, and #12 US Public (#31 overall) in *US News*.
- *Financial Times* ranked EMBA program #4 US Public and #1 Texas Public.
- Chaired the national search for Associate Dean for Graduate Programs.
- Led significant renovation and refurbishing of the Career Management Center and MS lounge.
- Transferred in excess of one million dollars to the college to support research and teaching missions.
- Undertook several curriculum innovations in PMBA and EMBA programs. Added courses in valuation, leadership development, and mergers and acquisitions (team taught by four faculty). Also, undertook several upgrades to the City Center facility.
- Led the efforts to launch Veterans Affinity Group, Aggie Women MBAs, and Net Impact.
- Instituted the MBA Scholar Award to recognize outstanding academic achievements in all three MBA programs.

# Executive Associate Dean: Mays Business School (2008-2015)

- Areas of responsibilities spanned many facets of managing the Mays Business School including oversight for faculty (150), staff (115), budget (\$60 million operating and \$110 million endowment), facilities, IT, centers of excellence (8), research, and doctoral programs (5).
- Direct reports included five department heads (eleven individuals over a seven-year period), Assistant Dean for Finance and Administration, Director for Real Estate Center, and Executive Director for the Center for International Business Studies.
- Provided oversight for the promotion and tenure process at the College level.
- Directed and coordinated budget preparation and administration for the College.
- Collaborated with the Dean on strategic planning and accreditation.
- Coordinating with the department heads and Dean, recruited 36 tenured/tenure-track faculty and 22 APT faculty over a seven-year period.
- Created and launched the Dean's Distinguished Scholar Series. The late Dr. C. K. Prahalad (Michigan) was the inaugural scholar, followed by Drs. Katherine Schipper (Duke), Kathleen Eisenhardt (Stanford), Philip Kotler (Northwestern), and Andrew Lo (MIT).

- Launched the prestigious Mays Business School Faculty Lifetime Achievement in Research and Scholarship Award. Dr. Michael Hitt was the inaugural recipient.
- Instituted the Ricky Griffin Faculty Research Achievement Award. Previously known as Mays Research Award.
- Created the Mays Business School Faculty Service Award.
- Led the searches for the Department Heads of Finance, Information and Operations Management, Marketing, and Management, as well as the search for the Director of Mays Marketing and Communications.
- Managed two budget cuts (about 10%) and a reallocation from the university with minimal impact on the educational mission of Mays Business School.
- Created Mays *Think Tank*, a team of ten faculty, charged with reviewing the school's progress toward national rankings and provide recommendations to propel the school to a consensus Top 10 public business school status.
- To address the declining number of tenured/tenure-track faculty, developed a plan in 2014 to add ten new faculty and identified the resources needed for these hires. Created a contingency bridge program to manage the \$600K shortfall resulting from this plan.
- Mays Business School received differential tuition authorizations in 2008 and 2011 resulting in \$3.25 million of incremental revenues. In partnership with the Dean, deployed these proceeds to reduce section sizes, recruit additional APT faculty, fund a communications laboratory, and provide financial support for study abroad and other global experiences.
- Provided oversight for Mays Ph.D. programs. During my tenure as EAD, Mays Ph.D. graduates received offers from some of the finest universities in the country, including University of Florida, Georgia Institute of Technology, Indiana University, McGill University, University of North Carolina, Northwestern University, the University of Notre Dame, The Ohio State University, the University of Pennsylvania (Wharton School), Rice University, University of Texas at Austin, and the University of Wisconsin.
- Led significant renovation and remodeling projects in Wehner and Cox Wing. Completed all projects on schedule and within budget.
- Under my leadership, the Center for International Business Studies added several new partners world-wide and increased student participation in the study abroad programs by about fifty percent.
- Served as Chair of Mays Executive Committee, a decision-making body comprised of deans, department heads, a faculty senator, and a staff representative.
- Served as Chair of Mays Research Council, a committee of six faculty -- holders of endowed chairs -- who played a key role in leading the research agenda for the College. The Council also reviewed all the nominations for endowed positions and made recommendations to the Dean.

Associate Dean for Graduate Programs: Mays Business School (2004-2008)

- Leadership responsibilities for Mays Full-Time MBA (FTMBA, 150 students), Executive MBA (Houston, 100 students), six MS programs (600 students), and Graduate Business Career Services.
- Direct reports included Director of FTMBA Program, Director of Executive MBA Program, Director of Marketing and Admissions, Director of Graduate Business Career Services, and three APT faculty.
- Managed a team of 18 staff members and generated revenues in excess of \$6 million.
- Established a joint MBA/MD program with TAMU Medical School. The first MD/MBA class matriculated in 2006.
- Received a \$50K scholarship commitment from the FTMBA Class of 2007, a \$30K commitment from the FTMBA Class of 2008, and \$34K pledge from the EMBA Class of 2008.
- Led the search for FTMBA Director resulting in a hire from Duke University.
- In 2007, achieved a budget surplus of \$1.2 million in the MBA program accounts, from a deficit of \$125K in 2004.
- From 2004 to 2008, increased EMBA revenues by 45% to \$2.6 million, FTMBA program fee proceeds by 69% to \$797K, and MS program fee proceeds by 50% to \$787K.
- Achieved excellent national ranking for the FTMBA program: #8 Public by *Forbes*, #11 Public by *Wall Street Journal*, #11 Public by *US News*, #14 Public by *Financial Times*, and #8 Public by *Princeton Review*.
- In 2007, *US News* and *Financial Times* ranked Mays FTMBA program #1 for placements in the nation, and *Forbes* ranked Mays FTMBA program #1 for value.
- In 2008, the *Wall Street Journal* ranked Mays EMBA #1 in the nation for return on investment.
- Increased EMBA faculty compensation to attract and retain the best faculty.
- Collaborated with the director to launch Mays EMBA Women's Summit.
- Added a second Finance course to the MBA core, and Marketing Research and Financial Statement Analysis as elective options.
- Instituted the Jerry R Strawser Outstanding FTMBA Student Award.

*Department Head*: Department of Information & Operations Management, Mays Business School (2002-2004).

- Led a department with 29 faculty, 6 staff, 700 majors, and a budget of \$5 million.
- Programs: BA in MIS, BA in Supply Chain Management, MS in MIS, and Ph.D. in MIS and Ph.D. in Decision Sciences.
- Direct reports included the Director of the Center for the Management of Information Systems, a center of excellence with twenty corporate board members.
- Recruited four new tenure-track faculty members with doctorates from MIT, Michigan (2), and Illinois.

- Managed a \$150K budget reduction from the college with no impact on student educational experience or faculty support. At the conclusion of two-year term as Head, the department had a healthy surplus in all its state and foundation accounts.
- Hired new leadership in the Undergraduate Program Office to provide renewed energy and focus. Collaborated with a faculty task force to redesign the MIS curriculum.
- Developed an MBA/MIS track for MBAs to receive both degrees in 22 months. Recruited the first class of four students to this program.
- Raised scholarship funds from Central Texas Foundation to support MIS scholarships.
- Due to some staff challenges, the departmental financial accounts had not been reconciled and personnel files not updated for a few years. By addressing those challenges, all records were promptly brought up to date and the services provided to students and faculty improved considerably.
- Created an environment for junior faculty to improve their research productivity by minimizing service roles, reducing teaching loads, and increasing travel and GA support.

*Interim MBA Program Director*: Mays Business School, (May 2005 – July 2006, Aug. 2015-Dec. 2015).

- Provided oversight for the efficient operation of the Full-time MBA program.
- Developed annual budget and coordinated the marketing plan.
- Partnered with the Graduate Business Career Services on improving student placement.
- Led a corporate board of fifteen members and developed strategies to improve rankings.

*Associate Department Head*: Department of Information & Operations Management, Mays Business School, (2001-2002).

- Assisted the Department Head with the coordination of all instructional and academic activities of the department.
- Managed departmental course and classroom scheduling.
- Collaborated with the Department Head on addressing and resolving faculty and student concerns and issues.

*Ph.D. Program Director*: Department of Information & Operations Management, Mays Business School, (1998–2001).

- Provided leadership for Ph.D. student recruitment, admissions, program evaluation, and student scholarships.
- Managed departmental Ph.D. course scheduling.
- Coordinated the first- and second-year exams and served as advisor for all Ph.D. students during their first year.

### **PROFESSIONAL LEADERSHIP**

Production and Operations Management Society (**POMS**) and The Institute of Operations Research and Management Sciences (**INFORMS**) are two leading international professional societies in the field.

### Production and Operations Management Society (POMS)

Vice President: Membership, (2023-2025), Elected Vice President: Education, (2017-2021), Elected Associate Vice President: Sponsorship, (2018-2021), Appointed Founder, Academic Leadership Group of Deans and Department Heads (2019-present) Member, Finance Committee (2018-present) Founding Chair, POMS Ph.D. Workshop Series (2020) Founding Chair, POMS Teaching Colloquium (2021) Founding Chair, POMS Leadership Colloquium (2021)

## The Institute for Operations Research and Management Sciences (INFORMS)

Chair, Job Placement Committee (2009-2012) Chair, Job Placement Committee (2005–2007) Chair, ACORD (Association of Chairs of OR Departments) (2005-2007) Member, Finance Committee (2009-2014) Member, Awards Committee (2011-2015) Member, Membership Committee (2005-2007)

# HONORS AND AWARDS

*Presidential Professor for Teaching Excellence*, (2023), awarded annually to two faculty at Texas A&M University.

*Wickham Skinner Teaching Innovation Award*, (2023), awarded annually by the Production and Operations Management Society to two faculty internationally.

*Dr. Arvind Mahajan PMBA Faculty Excellence Award*, (2023), awarded annually to one faculty by the graduating PMBA class.

Dr. Arvind Mahajan EMBA Faculty Excellence Award, (2021). Inaugural recipient selected by the EMBA Class of 2021.

*Executive MBA Outstanding Professor*, (2017, 2014, 2008), awarded annually by the Executive MBA students to one faculty member for excellence in teaching.

Beginning 2019, Mays MBA Scholar Award was named by the College as *Bala Shetty MBA Scholar Award* in recognition of my years of significant contributions to all three MBA programs.

*Professional MBA Outstanding Professor*, (2020, 2017, 2015, 2014), awarded annually by Professional MBA students to one faculty member for excellence in teaching.

*Dr. Dan Robertson FTMBA Faculty Excellence Award*, (2019, 2005), awarded annually by Full-Time MBA students to one faculty member for excellence in teaching. Inaugural recipient.

*Full-Time MBA Outstanding Professor*, (2001, 2000, 1998), awarded annually by Full-Time MBA students to one faculty member for excellence in teaching.

Association of Former Students Distinguished Achievement Award in Teaching, (University, 2016), Texas A&M University.

*Dr. Bala Shetty MBA Excellence Scholarship,* (2005), endowed by the graduating Full-Time MBA Class of 2005 in recognition of my significant contributions to Mays MBA program.

Association of Former Students Distinguished Achievement Award in Teaching, (College, 2001), Mays Business School.

*Mays Research Excellence Award*, (1995), awarded annually by Mays Business School to two faculty members for excellence in research.

*Outstanding Professor*, (1991, 1990), awarded by the Alpha Kappa Psi Business Fraternity to one faculty member for excellence in undergraduate teaching.

*Outstanding Professor*, (1984), the highest award given to faculty at Southern Methodist University for excellence in teaching.

*M-Award*, (1983), the highest award given to a student at Southern Methodist University for outstanding leadership and service. First international student ever to receive this prestigious award.

*Frederick Terman Academic Award*, (1983), awarded to a School of Engineering graduate student at Southern Methodist University for academic excellence.

*Bobby Leach Scholarship*, (1982), scholarship awarded by the student government at Southern Methodist University for outstanding leadership.

*Student Senate Service Award*, (1983), awarded by the student government at Southern Methodist University in recognition of service to the community.

*Winner of Three Gold Medals*, (1978), (K.S.K Iyanger Gold Medal, Professor N.A. Nikkam Gold Medal, Professor Sridhar Kumar Gold Medal), awarded at the commencement by the governor of Karnataka for securing the top place among all Master of Science graduates at the university.

## **UNIVERSITY SERVICE**

#### Committee Chair

Review of Center for Executive Development (2020-2021) Department of Information and Operations Management Faculty Recruiting (2020-2021) MS Analytics Program Review (2019) AFS Distinguished Award (Research) Selection (2018) Texas A&M University Entrepreneurship Council (2013-2015) Head Search, Department of Information and Operations Management (2011) Head Search, Department of Management (2010, 2015) Head Search, Department of Finance (2009) Head Search, Department of Marketing (2013) Associate Dean for Graduate Programs Search (2015) Mays Executive Committee (2008-2015) Mays Research Council (2008-2015) Mays Technology and Facilities Review (2008-2015) Department of Information and Operations Management Faculty Recruiting (2001-2002) INFO Ph.D. Advisory Committee (1997-2001)

### Committee Member

Mays Business School Promotion and Tenure Committee (2017-2020) TAMU Committee on Academic Freedom, Responsibility, and Tenure (2018-2020) Mays Innovation Center Review (2019-2020) University Research Council (2008-2015) Council of Graduate Deans (2008–2016) Agribusiness Intercollegiate Faculty (2004-2008) Biotechnology Intercollegiate Faculty (2004-2007) Mays Research Council (2016-2020) Mays Business School Executive Committee (2002-2016) CMIS Faculty Advisory Board (2001–2002) Mays Business School Dean Search (2000–2001) Mays Business School Graduate Instruction Committee (1998-2002, 2004-2008, 2015-2016) INFO Department Advisory Committee (1998-2002) INFO Department Faculty Recruiting Committee (1999-2002) TAMU Council of Principal Investigators (1996-1997) Mays Business School Research Advisory Committee (1995-1998)

INFO Ph.D. Advisory Committee (1991-2002, 2017-2020) Mays Master's Program Evaluation Committee (1994-95) University Mini-grant Committee (1993-1995) CMIS Evaluation Committee (1992-93) BANA Core Integration Committee (1994-95) Committee for CBA Honors Program (1988-89) CIBS Research Committee (1985)

#### Track Coordinator

Management Science (1988-89) Statistical Methods (1987-92) Programming in Fortran (1986-87)

#### Advisor

MBA Veterans Association (2015-2016) Alpha Kappa Psi Business Fraternity (1988-91) Aggie Partners (1999-2002) MBA Association (2011-2013)

#### **RESEARCH INTERESTS**

Supply Chain Management, Financial Engineering Network, Linear, and Nonlinear Optimization Machine Learning and Artificial Intelligence

# **EDITORIAL APPOINTMENTS**

Senior Editor	Production and Operations Management Journal (2017-
	present)
Associate Editor	Operations Research (1991–1996)
Associate Editor	Naval Research Logistics (1993–2012)
Associate Editor	Decision Sciences (1996-2000)
Guest Editor	Annals of Operations Research (1988-89, 1991-93)
Editorial Review Board	Journal of Enterprise Information Systems (2003–2008)
Editorial Review Board	Int. J. of Business Performance and Supply Chain
	Modeling (2008–2012)

### **REVIEWER**

National Science Foundation, <u>Management Science</u>, <u>Operations Research</u>, <u>Production and</u> <u>Operations Management Journal</u>, <u>IEEE Transactions on Computers and Communications</u>, INFORMS Journal on Computing, Naval Research Logistics, Interfaces, Networks, Decision Sciences, Annals of Operations Research, Operations Research Letters, International Conference on Parallel Processing, Discrete Applied Mathematics, European Journal of Operational Research, Computational Optimization and Applications, Transportation Science, Computers and Operations Research, Math Programming.

## **RESEARCH ARTICLES**

- 1. "Multicommodity Network Problems: Applications and Computations," <u>IIE Transactions</u>, Vol. 16 (1984), pp. 127-134, with J. Kennington, R. Helgason, and B. Patty.
- "A Generalization of Polyak's Convergence Result for Subgradient Optimization," <u>Mathematical Programming</u>, Vol. 13 (1987), pp. 309-318, with J. Kennington and R. Helgason.
- 3. "The Equal Flow Problem," <u>European Journal of Operational Research</u>, Vol. 36 (1988), pp. 107-115, with J. Kennington and A. Ali.
- "Reoptimization Procedures for Multiple Objective Network Problems," <u>Annals of</u> <u>Operations Research</u>, Vol. 20 (1989), pp. 219-232, with D. Olson, R. Venkataramanan, and I. Murthy.
- 5. "A Simplex Specialization for the Equal Flow Problem," <u>IIE Transactions</u>, Vol. 22 (1990), pp. 24-30.
- 6. "A Relaxation/Decomposition Algorithm for the Fixed Charge Network Problem," <u>Naval</u> <u>Research Logistics</u>, Vol. 37 (1990), pp. 327-340.
- 7. "A Heuristic Algorithm for a Network Problem with Variable Upper Bounds," <u>Networks</u>, Vol. 30 (1990), pp. 23-32.
- 8. "A Parallel Projection for the Multicommodity Network Model," <u>Journal of Operational</u> <u>Research Society</u>, Vol. 41 (1990), pp. 837-842, with R. Muthukrishnan.
- 9. "Approximate Solutions to Large Scale Capacitated Facility Location Problems," <u>Applied</u> <u>Mathematics and Computation</u>, Vol. 23 (1990), pp. 228-245.
- 10. "Reoptimization Procedures for Networks with Side Constraints," <u>Computers and</u> <u>Industrial Engineering</u>, Vol. 20 (1990), pp. 243-249.
- 11. "Model Management in Business," <u>Business Perspectives</u>, Vol. 12 (1990), pp. 13-16, with A. Bharadwaj and A. Lo.
- "The K-Coverage Concentrator Location Problem," <u>Applied Mathematical Programming</u>, Vol. 16 (1992), pp. 94-100, with R. Sarathy and A. Sen. Page 11 of 18

- 13. "Model Management Systems A Survey," <u>Annals of Operations Research</u>, Vol. 38 (1993), pp. 17-68, with A. Bharadwaj, J. Choobineh, and A. Lo.
- 14. "A Model for Resource Constrained Production and Inventory Management," <u>Decision</u> <u>Sciences</u>, Vol. 25 (1994), pp. 561-580, with K. Bretthauer, S. Syam, and S. White.
- 15. "Multicommodity Networks: Algorithms and Computations," in C. Harris, and S. Gass, Eds., Encyclopedia of Operations Research, Vol.1 (1995), Kluwer Academic Publishers.
- 16. "A Branch and Bound Algorithm for the Integer Quadratic Knapsack Problem," <u>INFORMS Journal on Computing</u>, Vol. 7 (1995), pp. 109-116, with K. Bretthauer and S. Syam.
- 17. "The Nonlinear Resource Allocation," <u>Operations Research</u>, Vol. 43 (1995), pp. 670-683, with K. Bretthauer.
- "A Projection Method for the Integer Quadratic Knapsack Problem," <u>Journal of</u> <u>Operational Research Society</u>, Vol. 47 (1996), pp. 457-462, with K. Bretthauer and S. Syam.
- 19. "A Heuristic Algorithm for the Capacitated Multiple Supplier Inventory Grouping Problem," <u>Decision Sciences</u>, Vol. 27 (1996), pp.711-733, with S. Syam.
- 20. "Quadratic Resource Allocation with Generalized Upper Bounds," <u>Operations Research</u> <u>Letters</u>, Vol. 20 (1997), pp. 51-57, with K. Bretthauer.
- 21. "A Constrained Nonlinear 0-1 Program for Data Allocation," <u>European Journal of</u> <u>Operational Research</u>, Vol. 102 (1997), pp. 626-647, with R. Sarathy and A. Sen.
- 22. "Strategic Financial Risk Management and Operations Research A Review," <u>European</u> <u>Journal of Operational Research</u>, Vol. 97 (1997), pp. 1-16, with J. Mulvey and D. Rosenbaum.
- 23. "Coordinated Replenishments from Multiple Suppliers with Price Discounts," <u>Naval</u> <u>Research Logistics</u>, Vol. 45 (1998), pp. 579-598, with Sid Syam.
- 24. "Parameter Estimation in Stochastic Scenario Generation Systems," <u>European Journal of</u> <u>Operational Research</u>, Vol. 118 (1999), pp. 563-577, with J. Mulvey and D. Rosenbaum.
- 25. "Nonlinear Integer Programming for Optimal Allocation in Stratified Sampling," <u>European Journal of Operational Research</u>, Vol. 116 (1999), pp. 667-680, with K. Bretthauer and A. Ross.
- 26. "Multicommodity Networks: Algorithms and Computations," in C. Harris, and S. Gass, Eds., <u>Encyclopedia of Operations Research</u>, Vol. 2 (2001), Kluwer Academic Publishers.

- 27. "Nonlinear Resource Allocation," in C. Harris, and S. Gass, Eds., <u>Encyclopedia of</u> <u>Operations Research</u>, Vol. 2 (2001), Kluwer Academic Publishers, with K. Bretthauer.
- 28. "A Pegging Algorithm for the Nonlinear Resource Allocation Problem, "<u>Computers and</u> <u>Operations Research</u>, Vol. 29 (2002), pp. 505-527, with K. Bretthauer.
- "Financial Optimization An Overview," in C. Floudas, and P. Pardalos, Eds., <u>Encyclopedia of Optimization</u>, Vol.2 (2002), Kluwer Academic Publishers, with J. Mulvey.
- 30. "The Nonlinear Knapsack Problem Algorithms and Applications," <u>European Journal of</u> <u>Operational Research</u>, Vol. 138 (2002), pp. 459-472, with K. Bretthauer.
- "Specially Structured Nonlinear Integer Programs," <u>Naval Research Logistics</u>, Vol. 50 (2003), pp. 770-792, with K. Bretthauer and S. Syam.
- 32. "Financial Planning via Multi-Stage Stochastic Programming," <u>Computers and</u> <u>Operations Research</u>, Vol. 31 (2004), pp. 1-20, with J. Mulvey.
- 33. "Production and Inventory Management under Multiple Resource Constraints," <u>Mathematical and Computer Modeling</u>, Vol. 44 (2006), with K. Bretthauer, R. Vokurka, and S. Syam.
- 34. "Managing Co-creation in Information Technology Projects: A Differential Game Approach," <u>Information Systems Research</u>, Vol. 27 (2016), with E. Demirezen and S. Kumar.
- 35. "A Review of Recent Theoretical Development in Scheduling Dual-Gripper Robotic Cells," <u>International Journal of Production Research</u>, (2017), with C. Sriskandarajah.
- 36. "Two is Better than One: A Dynamic Analysis of Value Co-creation," <u>Production and</u> <u>Operations Management Journal</u>, Vol. 29 (Sept. 2020), with E. Demirezen and S. Kumar.
- 37. "A Framework for Analyzing the U.S. Coin Supply Chain," <u>Production and Operations</u> <u>Management Journal</u>, Vol. 29 (Dec. 2020), with Y. Huang, P. Zhu, S. Kumar, and C. Sriskandarajah.
- "An Optimization Framework for Analyzing Dual-donor Organ Exchange," <u>Production</u> <u>and Operations Management Journal</u>, (in press), with T. Le, C. Sriskandarajah, and J. Stauffer.

#### MANUSCRIPTS UNDER REVIEW

- 1. "Safety Stock Allocation in an Online Retailing Network: A Stochastic Optimization Approach," <u>Production and Operations Management Journal</u>, (Revise and Resubmit), with M. Majumdar, C. Sriskandarajah, and A. Agrawal.
- 2. "Managing Coins for Depository Institutions in Coin Supply Chains for Improved Circulation," <u>Production and Operations Management Journal</u>, (Revise and Resubmit), with Y. Huang, M. Mazumdar, P. Zhu, and C. Sriskandarajah.

## **BOOKS EDITED AND BOOK REVIEWS**

- 1. Model Management in Operations Research, Scientific Publishing Company, 1993.
- 2. Network Optimization and Applications, Scientific Publishing Company, 1989.
- 3. Review of Fundamentals of Network Analysis by Philips and Garcia, <u>Interfaces</u>, 1982, with R. Helgason.

## **DOCTORAL COMMITTEES**

- 1. Emre Demirezen (Co-Chair), Ph.D., Information and Operations Management, 2015
- 2. Siddhartha Syam (Chair), Ph.D., Information & Operations Management, 1994
- 3. Rathindra Sarathy (Co-Chair), Ph.D., Information & Operations Management, 1990
- 4. Jim Haylett (Chair, first 2 years), Ph.D., Information & Operations Management, 2002
- 5. Yiwei Huang (Member), Ph.D., Information and Operations Management, 2017
- 6. Rakesh Mallipeddi (Member), Ph.D., Information and Operations Management, 2019
- 7. Sudarshan Rajan (Member), Ph.D., Industrial and Systems Engineering, 2020
- 8. P. Sharifi (Member), Ph.D., Industrial Engineering & Systems Engineering, 2020
- 9. M. Majumdar (Member), Ph.D., Information and Operations Management (2017-present)
- 10. Seulchan Lee (Member), Ph.D., Information and Operations Management (2017-present)
- 11. Sandra Buzon (Member), Ph.D., Information and Operations Management (2019-present)
- 12. Mina Aliakbari (Member), Ph.D., Industrial and Systems Engineering (2018-2021)
- 13. Dawei Bai (Member), Ph.D., Operations Research, Princeton University, 1996
- 14. Ahmet Kuyumcu (Member), Ph. D., Industrial Engineering, 1996
- 15. Radha Mahapartra (Member), Ph.D., Business Analysis, 1994
- 16. Susan White (Member), Ph.D., Business Analysis, 1994
- 17. Anne Dillinger (Member), Ph.D., Business Analysis, 1993
- 18. Gabriella Marin (Member), Ph.D., Business Analysis, 1993
- 19. Shon Paul Williams (Member), Ph.D., Agricultural Economics, 1992
- 20. Barry Lawrence (Member), Ph.D., Business Analysis, 1992

## **CONFERENCE LEADERSHIP**

Track Chair, Revenue Management and Pricing, POMS Meeting, Houston, 2018

Nominee, INFORMS Treasurer (2014)

Track Chair, Academic and Industry Job Search, INFORMS Meeting, Phoenix, 2012

Track Chair, Academic and Industry Job Search, INFORMS Meeting, Charlotte, 2011

*Track Chair*, Academic and Industry Job Search, INFORMS Meeting, Austin, 2010 *Panel Chair*, Academic Job Search, INFORMS Meeting, Pittsburgh, 2006.

*Track Chair*, developed and coordinated the entire Financial Optimization track at the National INFORMS Meeting, San Antonio, 2000.

*Track Chair*, developed and coordinated the entire Network Optimization track at the National INFORMS Meeting, New Orleans, 1987.

*Panel Member*, served on the Plenary Panel on Research Strategies at the Annual Decision Sciences Institute Meeting in Hawaii (1994).

*Panel Chair*, developed and chaired a panel on Model Management Issues at the National INFORMS Meeting, Anaheim, 1991.

*Session Chair*, served as the session chair for Nonlinear Optimization (INFORMS 2001, Maui), Nonlinear Programming (INFORMS 2000, San Antonio), Resource Allocation (INFORMS 1998, Seattle), Network Optimization Models (DSI 1997, San Diego), Math Programming in Production (DSI 1991, Washington D.C.), Nonlinear Integer Programming (INFORMS 1991, Anaheim), Mathematical Programming (DSI 1990, San Diego), Network & Graphs (ORSA/TIMS 1990, Las Vegas), Network Optimization (ORSA/TIMS 1985, Los Angeles), Nonlinear Programming (ORSA/TIMS 1984, Dallas), Military Applications(ORSA/TIMS 1984, Dallas).

*Member* of <u>INFORMS</u>, <u>POMS</u>, <u>Decision Sciences Institute</u>, <u>American Society of</u> <u>Engineering Management</u>, <u>Omega Rho International Honor Society</u>, <u>Alpha Kappa Psi</u>, <u>Beta</u> <u>Gamma Sigma</u>, <u>Council of Supply Chain Management</u>

Served as a discussant at National Decision Sciences Institute Meeting in San Diego (1997) and in Las Vegas (1985).

## PRESENTATIONS AND PROCEEDINGS PUBLICATIONS

"Co-Production and Co-Creation of Value: A Differential Games Approach," with S. Kumar and E. Demirezen, Proceedings of the Annual HICSS Conference, Maui, 2012.

"A Supplier Selection Problem: A Differential Games Approach," with S. Kumar and E. Demirezen, Proceedings of the WISE Conference, Beijing, 2012.

"Specially Structured Nonlinear Integer Program," with K. Bretthauer, presented at the International INFORMS Meeting, Maui, 2001.

"Generalized Resource Allocation," with K. Bretthauer, presented at the National INFORMS Meeting, San Antonio, 2000.

"A Pegging Algorithm for Nonlinear Resource Allocation," with K. Bretthauer, presented at the National INFORMS Meeting, Seattle, 1998.

"Resource Constrained Order Quantities and Inventory Management," with K. Bretthauer, J. Haylett, and R. Vokurka, <u>Proceedings of the Annual Meeting of the Decision Sciences</u> <u>Institute</u>, San Diego, November 1997.

"Risk Management and Operations Research - A Tutorial," with J. Mulvey and D. Rosenbaum, presented at the Annual Meeting of the Decision Sciences Institute, Orlando, 1996.

"Quadratic Resource Allocation with GUB Constraints," with K. Bretthauer, presented at the National INFORMS Meeting, Washington D.C., 1996.

"Algorithms for a Class of Nonlinear Knapsack Problems," with K. Bretthauer, presented at the National INFORMS Meeting, New Orleans, 1995.

"The Nonlinear Resource Allocation Problem," with K. Bretthauer, presented at the National TIMS Meeting, Los Angeles, 1995.

"Nonconvex Resource Allocation," with K. Bretthauer, presented at the National TIMS Meeting, Phoenix, 1993.

"Multiple Supplier Inventory Grouping," with S. Syam, <u>Proceedings of the Annual Meeting</u> of the Decision Sciences Institute, Washington D.C., 1993.

"Order Quantities for Multi-Item Resource Constrained Inventory Systems," with K. Bretthauer, S. Syam, and S. White, <u>Proceedings of the Annual Meeting of the Decision</u> <u>Sciences Institute</u>, San Francisco, 1992.

"A 0-1 Polynomial Program for Data Allocation," with R. Sarathy, presented at the National ORSA/TIMS Meeting, Anaheim, CA, 1991.

"Data Allocation in Distributed Computing," with R. Sarathy and A. Sen, <u>Proceedings of the Annual Meeting of the Decision Sciences Institute</u>, San Diego, 1990.

"The K-Coverage Concentrator Location Problem," with R. Sarathy and A. Sen, presented at the National ORSA/TIMS Meeting, New York, 1989.

"A Parallel Implementation of the Projection Algorithm," with R. Muthukrishnan, presented at the National ORSA/TIMS Meeting, Vancouver, Canada, 1989.

"Mathematical Programming Models in Distributed Processing," presented at the National ORSA/TIMS Meeting, Denver, 1988.

"A Heuristic Algorithm for a Network Problem with Variable Upper Bounds," presented at the International TIMS Meeting, Paris, France, 1988.

"Vectorization and Parallel Computing," presented at the National ORSA/TIMS Meeting, New Orleans, 1987.

"Computational Experiments on Embedded Networks," presented at the National ORSA/TIMS Meeting, Miami, 1986.

"Network Applications in Scheduling," presented at the National ORSA/TIMS Meeting, Los Angeles, 1986.

"Processing Network Problems," presented at the National ORSA/TIMS Meeting, Atlanta, 1985.

"The Equal Flow Problem," with J. Kennington and A. Ali, presented at the National ORSA/TIMS Meeting, Dallas, 1984.

"A Comparison of Specialized Codes for Multicommodity Transportation Problem," with J. Kennington and B. Patty, presented at the National ORSA/TIMS Meeting, Orlando, 1983.

"Transforming Linear Programs to Networks," with J. Kennington, presented at the National ORSA/TIMS Meeting, Detroit, 1982.

# **TEACHING INTERESTS**

Business Analytics Artificial Intelligence Supply Chain Management Simulation Large Scale Optimization

# **COURSES TAUGHT**

- 1. Artificial Intelligence for Business (MS and MBA)
- 2. Real Options (Jonathan Munn) (Halliburton Presidential Leadership Excellence Program)
- 3. Analytical Models for Decisions under Uncertainty (Halliburton Business Leadership Development III, Kuwait Oil Company, Diamond Offshore)
- 4. Data, Models, and Decisions (Bertsimas and Freund) (MBA, Executive MBA, Professional MBA)
- 5. Supply Chain Management (Chopra and Meindl) (MBA)
- 6. Risk Management: Quantitative Tools (Hull; Jorion) (MBA)
- Data Analysis and Decision Making with Microsoft Excel (Albright, Winston, Zappe) (MBA)
- 8. Enterprise Resource Planning (Harvard Business School Cases) (BBA)
- 9. Programming in C++ (Bronson) (BBA)
- 10. Practical Management Science (Winston and Albright) (MBA)
- 11. Network Optimization and Applications (Kennington and Helgason) (Ph.D.)
- 12. Optimization Models for Planning and Allocation (Shapiro) (BBA)
- 13. Applied Mathematical Programming (Bradley, Hax, and Magnanti) (BBA)
- 14. Operations Research (Winston) (BBA)
- 15. Management Science (Anderson, Sweeney, and Williams) (BBA)
- 16. Linear and Nonlinear Programming (Bazaara, Jarvis, Shetty) (Ph.D.)
- 17. Analytical Models for Decision Making (Lee) (BBA)
- 18. Operations Management (Myer) (BBA)
- 19. Statistics for Business and Economics (McClave and Benson) (BBA)
- 20. Basic Business Statistics (Berenson and Levine) (BBA)
- 21. Interactive Financial Planning System (Gray) (BBA)
- 22. Programming in BASIC (Starr and Janero) (BBA)
- 23. Programming in FORTRAN (Nickerson) (BBA)